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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,995	04/19/2004	Steven P. Floeder	59674US002	3492
32692 7590 01/04/2008 3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			EXAMINER RUSH, ERIC	
			ART UNIT 2624	PAPER NUMBER
			NOTIFICATION DATE 01/04/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

**Application No.**

10/826,995

**Applicant(s)**

FLOEDER ET AL.

**Examiner**

Eric Rush

**Art Unit**

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,7-12,14,15 and 22-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7-12,14,15 and 22-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 26 September 2007.
- ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. 20071206.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Response to Amendment**

This action is responsive to applicant's amendment and remarks received on 26 September 2007. Claims 1-3, 5, 7-12, 14-15, and 22-30 are currently pending.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 9 – 12 and 14 – 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 9 recites two webhandling apparatus' which wind the web around a first and second core, which are associated with different parts of the invention, fiducial readers, web marker, web controller, etc.. . The Examiner could not find support in the disclosure as filed to a first and second core

being associated with distinct parts of the invention. Claims 10 – 12 and 14 – 15 are also rejected as being dependent upon a rejected base claim.

2. In view of the amendment received on 26 September 2007 the rejections to claims 23 and 24 under 35 U.S.C. 112 second paragraph are withdrawn.

3. Claims 29 – 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 29 and 30 are rejected to because claim 29 has an improper dependency because it is not dependent upon an appropriate preceding claim. Examiner will treat claim 29 as being dependent upon claim 28, and claim 30 as being dependent upon claim 29. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claim 22 and 24 – 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Ho et al. U.S. Patent No. 6,934,028.

- With regards to claim 22, Ho et al. teach a method of marking a web of material having fiducial marks thereon, comprising: receiving the web of material in the form of a roll, (Ho et al., Column 5 Lines 46 – 55, Column

13 Lines 34 - 49) the web of material having at least two anomalies; (Ho et al., Column 6 Lines 7 - 23 and Lines 50 - 55) receiving digital information about the location of the at least two anomalies on the roll relative to the fiducial marks; (Ho et al., Column 13 Lines 18 - 33, Column 13 Line 61 - Column 14 Line 3) unwinding the roll; (Ho et al., Column 13 Lines 34 - 49) and applying locating marks to the web identifying the position of at least one of the anomalies, (Ho et al., Column 12 Line 66 - Column 13 Line 17) using the digital information and the fiducial marks as a guide. (Ho et al., Column 13 Line 7 - Column 14 Line 33)

- With regards to claim 24, Ho et al. teach the method according to claim 22, further comprising processing the digital information with an algorithm to identify at least one anomaly that qualifies as a defect with respect to a contemplated end use of the web, (Ho et al., Column 7 Lines 46 - 59, Column 8 Lines 12 - 60) and to identify at least one anomaly that does not qualify as a defect with respect to the contemplated end use of the web, (Ho et al., Column 7 Lines 46 - 59, Column 8 Lines 12 - 60) and wherein applying locating marks is done only to the at least one anomaly that represents an actual defect with respect to the contemplated end use of the web. (Ho et al., Column 10 Lines 48 - 53, Column 10 Line 63 - Column 11 Line 13, and Column 13 Lines 34 - 49)

- With respect to claim 25, Ho et al. teach a method comprising: receiving information describing a web of material having fiducial marks thereon; (Ho et al., Column 13 Lines 33 - 49) analyzing the information with a first algorithm to identify areas of the web containing anomalies; (Ho et al., Column 7 Lines 46 – 59, Column 8 Lines 12 - 60) digitally storing anomaly information that describes the areas of the web identified by the first algorithm as containing anomalies; (Ho et al., Column 13 Lines 18 – 33, Column 13 Line 61 – Column 14 Line 3) analyzing the anomaly information with a subsequent algorithm to produce defect information, the subsequent algorithm identifying at least one anomaly described by the anomaly information as a defect, and at least one anomaly described by the anomaly information as other than a defect, the defect information including at least information identifying the location of at least one defect relative to at least one of the fiducial marks on the web. (Ho et al., Column 13 Lines 18 – 33, Column 13 Line 61 – Column 14 Line 3)
- With respect to claim 26, Ho et al. teach the method of claim 25, further comprising: marking the location of the at least one defect on the web. (Ho et al., Column 12 Line 66 – Column 13 Line 17)

- With respect to claim 27, Ho et al. teach the method of claim 25, further comprising: producing a web conversion plan using the defect information. (Ho et al., Column 13 Lines 33 – 49)
  
- With respect to claim 28, Ho et al. teach a method of marking defects on a web of material having fiducial marks thereon, comprising: receiving the web of material in the form of a roll, (Ho et al., Column 5 Lines 46 – 55, Column 13 Lines 34 - 49) the web of material having a plurality of anomalies; (Ho et al., Column 6 Lines 7 – 23 and Lines 50 - 55) receiving digital information about the location of the plurality of anomalies on the roll, relative to the fiducial marks; (Ho et al., Column 13 Lines 18 – 33, Column 13 Line 61 – Column 14 Line 3) receiving digital information describing the anomalies to determine that at least one of the plurality of anomalies is an actual defect with respect to the contemplated end use of the web, (Ho et al., Column 7 Lines 46 – 59, Column 8 Lines 12 - 60) and one of the plurality of anomalies is not a defect with respect to the contemplated end use of the web; (Ho et al., Column 7 Lines 46 – 59, Column 8 Lines 12 - 60) unwinding the roll; (Ho et al., Column 5 Lines 46 – 55, Column 13 Lines 34 - 49) and applying the locating marks to the web identifying the position of the at least one anomaly that qualifies as an actual defect. (Ho et al., Column 12 Line 66 – Column 13 Line 17)

- With respect to claim 29, Ho et al. teach the method of claim 29, wherein the locating marks are not applied to the at least one anomaly that does not qualify as an actual defect. (Ho et al., Column 10 Lines 48 – 53, Column 10 Line 63 - Column 11 Line 13, and Column 13 Lines 34 – 49, the go defects can be excluded from the final reports)
- With respect to claim 30, Ho et al. teach the method of claim 29, further comprising: selecting one or more algorithms that identify defects, (Ho et al., Column 6 Lines 7 – 23, Lines 50 – 55, and Column 10 Lines 48 - 54) and wherein processing the digital information comprises applying the selected one or more algorithms to the digital information describing the anomalies. (Ho et al., Column 6 Lines 7 – 23 and Lines 50 - 55)

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
  7. Claims 1 – 3, 5, 9 -12, and 14 - 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al. U.S. Patent No. 6,934,028 in view of Korngold et al. U.S. Patent No. 6,814,514.
- With regards to claim 1, Ho et al. teach a method of analyzing a web of material containing at least two anomalies, comprising: imaging at least a



portion of the web to provide digital information; (Ho et al., Column 8 Lines 12 - 20) processing the digital information with an initial algorithm to identify regions on the web containing the at least two anomalies; (Ho et al., Column 6 Lines 7 – 23 and Lines 50 - 55) placing fiducial marks on the web, wherein the fiducial marks uniquely identify a position on the web; (Ho et al., Column 12 Line 66 – Column 13 Line 17) winding the web onto a roll; (Ho et al., Column 13 Lines 34 - 49) recording positional information localizing the identified regions relative to the fiducial marks; (Ho et al., Column 13 Lines 18 – 33, Column 13 Line 61 – Column 14 Line 3) and subsequent to the winding step, unwinding the web and applying locating marks to the web identifying the position of at least one of the identified regions, using the positional information and the fiducial marks as a guide. (Ho et al., Column 13 Lines 34 - 49) Ho et al., fail to teach wherein the fiducial marks uniquely identify a position on the web. Korngold et al. teach wherein the fiducial marks uniquely identify a position on the web. (Korngold et al., Column 3 Lines 45 – 58 and Column 4 Lines 46 - 55) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Ho et al. to include the teachings of Korngold et al. This modification would have been prompted in order to quickly locate and advance to defects that require further attention during a re-inspection/certification step, such as the one discussed by Ho et al.

- With regards to claim 2, Ho et al. in view of Korngold et al. teach the method according to claim 1. Ho et al. teach the method further comprising: storing or buffering the digital information describing the identified regions; (Ho et al., Column 11 Lines 23 – 50, Column 12 Lines 27 - 38) processing the digital information describing the identified regions to identify at least one identified region that qualifies as an actual defects with respect to the contemplated end use of the web, (Ho et al., Column 7 Lines 46 – 59, Column 8 Lines 12 - 60) and to identify at least one identified region that does not qualify as an actual defect with respect to the contemplated end use of the web; (Ho et al., Column 7 Lines 46 – 59, Column 8 Lines 12 - 60) and wherein the locating mark is applied to identify the position of only the at least one identified region that qualifies as an actual defect with respect to the contemplated end use of the web. (Ho et al., Column 10 Lines 48 – 53, Column 10 Line 63 - Column 11 Line 13, and Column 13 Lines 34 - 49)
- With regards to claim 3, Ho et al. in view of Korngold et al. teach the method according to claim 2. Ho et al. teach wherein processing the digital information describing the identified regions comprises analyzing the extracted identified regions with at least one subsequent algorithm to determine at least one identified region that qualifies as an actual defect

with respect to the contemplated end use of the web. (Ho et al., Column 13 Line 42 – Column 14 Line 33)

- With regards to claim 5, Ho et al. in view of Korngold et al. teach the method according to claim 2. Ho et al. teach wherein the stored or buffered information is processed after the imaging has been performed on the entire web. (Ho et al., Column 13 Lines 34 – 49, the re-inspection step use the stored information for defect and falw verification plus additional processing)
  
- With regards to claim 9, Ho et al. teach a system for marking a web of material having at least two anomalies, comprising: a fiducial marker for applying fiducial marks on a portion of the web, (Ho et al., Column 12 Line 66 – Column 13 Line 17) wherein the fiducial marks uniquely identify particular positions on the web; (Ho et al., Column 12 Line 66 – Column 13 Line 17) an inspection module for imaging the portion of the web to provide digital information, (Ho et al., Column 8 Lines 12 - 20) processing the digital information with an initial algorithm to identify regions on the web containing the anomalies, (Ho et al., Column 6 Lines 7 – 23 and Lines 50 - 55) and determining positional information localizing the identified regions relative to the fiducial marks; (Ho et al., Column 12 Line 66 – Column 13 Line 17) a fiducial reader for reading and providing localizing

information from the fiducial marks; (Ho et al., Column 13 Line 34 – Column 14 Line 33, Ho et al. teach inspecting, detecting, and marking defects and two different locations and times, wherein the second location reads the marks and associates the marks on the web with the defect location and classification with the aid of a database which was created during the first inspection) a web marker for applying locating marks to the web; (Ho et al., Column 12 Line 66 – Column 13 Line 17) a web marker controller for controlling the web marker so as to apply locating marks to the web identifying the position of at least one of the anomalies, (Ho et al., Column 12 Line 66 – Column 13 Line 17) using the positional information and the localizing information as a guide, (Ho et al., Column 12 Line 66 – Column 13 Line 49) and; wherein the fiducial marker and the inspection module are associated with a first webhandling apparatus that winds the web around a first core, and wherein the fiducial reader, the web marker, and the web marker controller are associated with a second webhandling apparatus that winds the web around a second core. (Ho et al., Column 13 Line 34 – Column 14 Line 33, Ho et al. teach inspecting, detecting, and marking defects and two different locations and times, wherein the second location reads the marks and associates the marks on the web with the defect location and classification with the aid of a database which was created during the first inspection) Ho et al., fail to teach wherein the fiducial marks uniquely identify a position on the web. Korngold et al.

teach wherein the fiducial marks uniquely identify a position on the web. (Korngold et al., Column 3 Lines 45 – 58 and Column 4 Lines 46 - 55) It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Ho et al. to include the teachings of Korngold et al. This modification would have been prompted in order to quickly locate and advance to defects that require further attention during a re-inspection/certification step, such as the one discussed by Ho et al.

- With regards to claim 10, Ho et al. in view of Korngold et al. teach the system according to claim 9. Ho et al. teach wherein before marking at least one of the anomalies is determined to qualify as an actual defect with respect to a contemplated end use of the web, (Ho et al., Column 7 Lines 46 – 59, Column 8 Lines 12 - 60) and least one of the anomalies is determined to not qualify as an actual defect with respect to the contemplated end use of the web, (Ho et al., Column 7 Lines 46 – 59, Column 8 Lines 12 - 60) and wherein the anomalies to which locating marks are applied by the web marker controller are those determined to qualify as an actual defect with respect to the contemplated end use of the web. (Ho et al., Column 10 Lines 48 – 53, Column 10 Line 63 - Column 11 Line 13, and Column 13 Lines 34 - 49)

- With regards to claim 11, Ho et al. in view of Korngold et al. teach the system according to claim 9. Ho et al. teach wherein the inspection module extracts information defining identified regions from the digital information, (Ho et al., Column 10 Line 63 – Column 11 Line 50) and wherein the system further comprises: a data storage module operative to store the extracted information defining the identified regions on the web containing anomalies, (Ho et al., Column 13 Line 61 – Column 14 Line 33) as well as the determined positional information localizing the regions on the web containing anomalies, (Ho et al., Column 13 Line 61 – Column 14 Line 33) as well as the determined positional information localizing the regions on the web containing anomalies relative to the fiducial marks; (Ho et al., Column 13 Line 7 – Column 14 Line 33) a processor associated with the web marker controller operative to receive information defining the identified regions stored in the data storage module and analyzing the extracted information defining the identified regions with at least one subsequent algorithm to determine at least one anomaly that represents an actual defect with respect to a contemplated end use of the web, (Ho et al., Column 13 Line 42 – Column 14 Line 33, Column 10 Line 49 – Column 11 Line 14) and at least one anomaly that does not represent an actual defect with respect to the contemplated end use of the web. (Ho et al., Column 13 Line 42 – Column 14 Line 33, Column 10 Line 49 – Column 11 Line 14)

- With regards to claim 12, Ho et al. in view of Korngold et al. teach the system according to claim 10. Ho et al. teach wherein the inspection module stores or buffers the identified regions for the processor. (Ho et al., Column 12 Lines 27 – 38)
  - With regards to claim 14, Ho et al. in view of Korngold et al. teach the system according to claim 9. Ho et al. teach wherein the web marker places locating marks on or adjacent to the anomalies whose position they identify. (Ho et al. Column 13 Lines 7 – 17)
  - With regards to claim 15, Ho et al. in view of Korngold et al. teach the system according to claim 9. Ho et al. teach wherein the web marker places locating marks that are spaced in a predetermined way from the anomalies whose position they identify. (Ho et al. Column 13 Lines 7 – 17)
8. Claims 7 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al. U.S. Patent No. 6,934,028 in view of Korngold et al. U.S. Patent No. 6,814,514 as applied to claim 1 above, and further in view of Dante et al. U.S. Patent No. 5,365,596.
- With regards to claim 7, Ho et al. in view of Korngold et al. teach the method according to claim 1. Ho et al. fail to teach wherein the locating

marks are on or adjacent to the anomalies whose position they identify.

Dante et al. teach wherein the locating marks are on or adjacent to the anomalies whose position they identify. (Dante et al., Column 10 Lines 32 – 43) It would have been obvious to one of ordinary skill in the art to modify the teachings of Ho et al. in view of Korngold et al. to include the teachings of Dante et al. This modification would have been prompted in order to minimize the amount of material which would need to be removed in the case of detected defects.

- With regards to claim 8, Ho et al. in view of Korngold et al. teach the method according to claim 1. Ho et al. fail to teach wherein the locating marks are spaced in a predetermined way from the anomalies whose position they identify. Dante et al. teach wherein the locating marks are spaced in a predetermined way from the anomalies whose position they identify. (Dante et al. Column 10 Lines 32 – 43) It would have been obvious to one of ordinary skill in the art to modify the teachings of Ho et al. in view of Korngold et al. to include the teachings of Dante et al. This modification would have been prompted in order to minimize the amount of material which would need to be removed in the case of detected defects.



9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al. U.S. Patent No. 6,934,028 in view of Dante et al. U.S. Patent No. 5,365,596.

- With regards to claim 23, Ho et al. teach the method according to claim 22. Ho et al. fail to teach wherein: the locating marks are applied to the web within 1 mm of the anomalies they identify. Dante et al. teach wherein: the locating marks are applied to the web within 1 mm of the anomalies they identify. (Dante et al., Column 10 Lines 32 – 43) It would have been obvious to one of ordinary skill in the art to modify the teachings of Ho et al. to include the teachings of Dante et al. This modification would have been prompted in order to minimize the amount of material which would need to be removed in the case of detected defects.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Rush whose telephone number is (571) 270-3017. The examiner can normally be reached on 7:30AM - 5:00PM (EST).

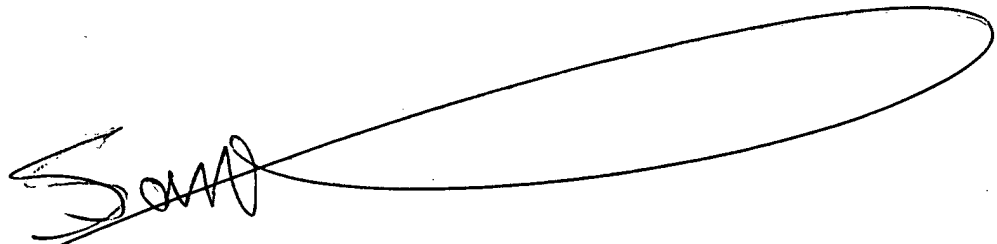
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on (571) 272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number:  
10/826,995  
Art Unit: 2624

Page 18

ER

A handwritten signature in black ink, appearing to read 'S. Ahmed', with a long, sweeping horizontal line extending to the right.

**SAMIR AHMED**  
**SUPERVISORY PATENT EXAMINER**